4/12/88 R5650-2

JAPAN · ECONOMIC · INSTITUTE

JEI

REPORT

A Two-Part Report: A and B

NO. 14A April 8, 1988

JAPAN'S IMPORTS OF MANUFACTURED GOODS

Summary

Japan's imports of manufactured goods, while increasing dramatically in 1986 and 1987, are still relatively small. Yet the latest jump comes on top of a steady increase that has been going on for years: between 1973 and 1987 the volume of manufactured imports rose two-and-a-half times. Manufactures as a share of all imports also increased during this period, reaching 44 percent last year.

The role of American exports to Japan has also been changing. For example, shipments of electric and nonelectric machinery and transportation equipment from the United States were rising even before the yen began its rapid ascent. In 1987 more than half of all U.S. goods sold in Japan were manufactured products, belying the image of the United States as primarily a supplier of industrial and agricultural raw materials. Even so, American policymakers and others looking at Japan's manufactured imports even in 1987 concluded that while barriers -- whether the creation of government or a result of business practices -- were lower than earlier, they are still at least partly responsible for keeping U.S. products out.

Eventually further changes could silence Japan's critics, but not so far. While manufactured imports in Japan are up, they are still lower than in comparable countries. While barriers are down, they remain a factor. The rapid increases in imports in 1986 and 1987 have not persuaded those who a few years ago saw lack of access as a problem.

Others see the situation completely differently. In their view import barriers have not been a serious problem since the late 1970s, if then. These experts admit that barriers exist, but deny their importance in explaining Japan's trade; other factors, such as resource endowments, are seen as the key. This study looks at how restrictions on access compare with competing reasons in explaining Japan's import pattern.

The Importance of Manufactured Goods

As a percentage of Japan's total imports, manufactured goods are remarkably low compared to other industrial countries (see Table 1). While the data in this and other tables refer to 1985, and imports of manufactured goods rose dramatically in Japan in 1986 and 1987, the huge discrepancies in 1985 suggest that the differences between Japan and the other countries, while no doubt smaller in 1987, remain substantial. In one sense it is hardly surprising that Japan's manufactured imports are so low, since its manufactured exports are very competitive in other countries despite the considerable difficulties of operating internationally.

Table 1: Manufactured Goods as Percent of Total Imports

	Japan	United States	Canada	European Community*	EFTA*
1982	20.2%	57.7%	75.0%	41.7%	66.2%
1983	22.2	61.2	78.9	55.9	67.6
1984	24.2	66.4	80.0	56.5	68.0
1985	25.3	70.1	81.7	58.1	69.7

*The European Community includes Belgium, Denmark, the Federal Republic of Germany, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom. EFTA, the European Free Trade Association, includes Austria, Finland, Iceland, Norway, Sweden and Switzerland.

Note: The figures in this table and the graph are not comparable because of differing category classifications.

Source: Calculated from United Nations Statistical Office, Comtrade database.

Consider, for instance, the impact of transportation costs on a product of uniform quality and subject to no or very low tariffs. Since average U.S. costs cannot be lower than those in Japan when the difference in transportation costs is taken into account (a condition for exports to Japan) and simultaneously be higher (a condition for imports from Japan), Americans will either export or import an item from Japan, but not both. If we know the Japanese export a product, then we should not expect them to import it. More generally,

The JEI REPORT (ISSN 0744-6489) is published weekly except for the New Year, Memorial Day, Labor Day, Thanksgiving and Christmas holiday weeks for $40 per year by the Japan Economic Institute of America, 1000 Connecticut Avenue, N.W., Washington, D.C. 20036. Second class postage paid at Washington, D.C. POSTMASTERS: Send address changes to JEI REPORT, 1000 Connecticut Avenue, N.W., Washington, D.C. 20036.

if Japanese manufactures are highly competitive abroad, we should expect their manufactured imports to be low.

Yet other countries do plenty of this kind of trade. Even countries that export large amounts of a product generally import it as well. Thus while Sweden exports its Volvos and Saabs around the world, it also imports cars from Britain, Germany and elsewhere. Japan, by contrast, is among the world's powerhouses in terms of motor vehicle exports, selling over 2 million cars in the U.S. market alone annually and about 3 million in other export markets, but it imports only about 100,000 cars each year from abroad.

Measuring Intra-Industry Trade - Table 2 gives one measure of the extent to which countries export and import the same item, a phenomenon called intra-industry trade. The index ranges in value from -1 for those countries that only import the good to 1 for those that only export. A value of zero indicates that the country exports and imports a product in equal amounts. Positive or negative values close to zero indicate extensive intra-industry trade. In the case of the European Community two figures are given: one for all trade crossing national boundaries and one that excludes intra-community trade. For the European countries, intra-industry trade is more likely for reasons of geography alone. The external trade figure offers a more meaningful comparison with nations far from other industrial countries such as Japan, or continental countries like Canada and the United States.

The figures show that Japan generally has much less intra-industry trade than the other countries. Canada has the most, hardly surprising considering that much of the Canadian manufacturing base is located close to the United States. Even the European Community's trade with the rest of the world (which includes some non-member European countries) includes more intra-industry trade than Japan's. Notice, though, that there are important exceptions: Japan has more intra-industry trade in chemicals than any of the others and it is in the middle range in textiles, ahead of Canada but behind the United States.

Manufactured imports have been rising in Japan for some time, although there is considerable year-to-year variation both overall and in particular categories (see Table 3). In 1986 and 1987 the increases were particularly rapid. As a percentage of all Japanese imports, manufactured goods have shown the same substantial annual fluctuation, but are clearly rising over the long term (see Graph). While in the late 1960s manufactured goods accounted for under a quarter of all imports, in 1987 the ratio hit 44 percent. In February 1988 it was a record-high 49 percent.

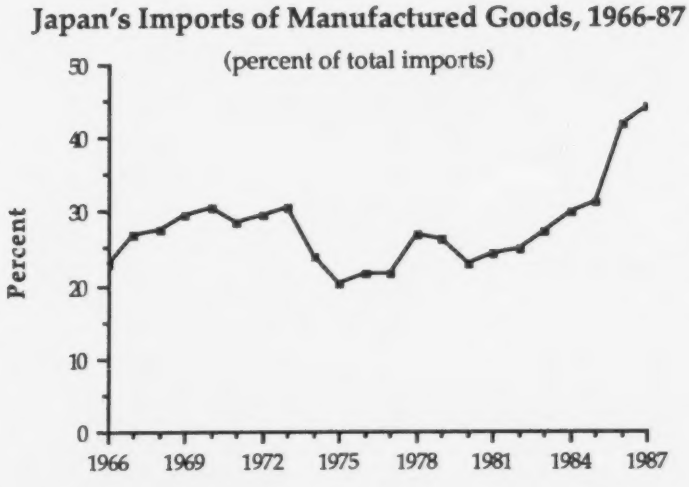
The graph clearly shows the effect of the two oil shocks. During both the price of crude oil jumped and demand for dollars to pay for the oil soared. Accordingly, the value of the dollar rose and the yen weakened. The new exchange rate tended to raise the price of all imports; demand for manufactured goods was especially price-sensitive. The graph demonstrates the result: the oil shocks reduced manufactured imports relative to other imports. In fact, it appears that each of the oil shocks was enough to reverse for a time the upward trend in the share of manufactured imports.

Table 2: Major Industrial Countries' Indices of Intra-Industry Trade, 1985

	Japan	United States	Canada	European Community Overall	European Community External
Steel	0.80	-0.80	0.06	0.19	0.46
Chemicals	0.04	0.14	-0.08	0.13	0.34
Other Semimanufactures	0.24	-0.48	0.46	-0.02	-0.02
Specialized Industrial Machinery	0.78	-0.02	-0.40	0.28	0.52
Office and Telecommunications Equipment	0.72	-0.04	-0.30	-0.06	-0.18
Motor Vehicles	0.96	-0.50	0.04	0.18	0.42
Other Machinery and Transportation Equipment	0.64	0.08	-0.28	0.15	0.26
Household Appliances	0.94	-0.76	-0.38	-0.11	-0.20
Textiles	0.44	-0.36	-0.66	0.05	0.10
Clothing	-0.46	-0.9	-0.68	-0.09	-0.22
Other Consumer Goods	0.38	-0.64	-0.44	0.13	0.26
Total Manufactures	0.68	-0.28	-0.10	0.11	0.24

Note: The index is (exports - imports)/(exports + imports).

Source: Calculated from United Nations Statistical Office, Comtrade database.



Source: Ministry of Finance

Table 3: Quantum Indices of Japan's Manufactured Imports, 1973-87

(1980=100)

	All manufactured Imports	Chemicals	Non-electric Machinery	Electric Machinery	Transport Equipment	Precision Instruments	Miscellaneous Manufactured Goods
1973	75.9	67.7	*	*	*	*	108.8
1974	81.7	84.1	*	*	*	*	85.7
1975	61.2	42.1	*	*	*	*	68.6
1976	69.7	56.3	*	*	*	*	77.3
1977	70.7	62.3	*	*	*	*	76.9
1978	86.6	75.7	*	*	*	*	98.1
1979	102.6	97.8	*	*	*	*	111.5
1980	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1981	112.5	103.6	90.6	115.3	103.2	95.7	123.0
1982	113.3	113.1	90.8	116.2	51.6	92.0	130.1
1983	116.1	124.1	83.2	120.2	80.5	102.1	127.7
1984	139.6	141.4	100.6	158.4	81.7	135.4	155.1
1985	142.1	144.0	108.1	149.1	82.0	147.1	159.4
1986	176.8	151.8	109.8	154.9	110.9	141.8	224.9
1987	193.0	169.5	125.1	200.0	117.1	184.7	237.4

* Not available.

Note: Imports are c.i.f.

Source: Ministry of Finance

The trend toward more foreign-made manufactures has several aspects. Within most broad product categories, higher value-added goods are being purchased from abroad (see Table 4). Steel and other metal manufactures, for example, increased from about one-third to more than one-half of all ores and metals imports between 1973 and 1984.

Table 4: Shifts in Japan's Import Structure

Product Group	1984 Import Value (in billions of dollars)	Share of Processed and Manufactured Goods in Sectoral Imports 1973	1979	1983-84
Food	$13.9*			
Processed Food	2.8	22%	21%	20%*
Wood	6.7			
Processed	1.9	15	20	28
Manufactured	1.7	16	13	25
Ores and Metal	13.7			
Manufactures	7.1	34	41	51
Fibers, Textiles & Clothing	6.4			
Textiles	1.9	29	32	30
Clothing	1.9	15	29	30
Petroleum	45.5			
Petroleum Products	6.1	11	12	13

*Data refer to 1983.

Source: General Agreement on Tariffs and Trade, International Trade 1984/85, Appendix Table A-29 using data from Japan Tariff Association, The Summary Report: Trade of Japan, and United Nations, Yearbook of International Trade Statistics.

Intra-industry trade is up as well. In many cases the imports come from newly industrializing countries such as South Korea and Taiwan. Color television sets, for example, have long been a symbol of Japanese export success. But in 1987 Japanese exports slid 18 percent to 3.8 million units, while imports from South Korea, Taiwan, Hong Kong and Singapore soared from 21,493 to 347,471, an increase of 1,500 percent. In other words, Japan took only one year to develop significant intra-industry trade in color televisions. In steel the same pattern is evident: imports increased about 40 percent in 1987 while exports declined slightly. Imports of steel are now one-sixth the volume of exports. Table 5 shows Japan's imports of some important categories of manufactured goods in the 1985-87 period.

Unfortunately, U.S. exporters have not fully shared in this import boom, despite the dollar's drop against the yen and the currencies of most of its rivals in Europe and Asia. In the first half of 1987, the dollar value of Japanese manufactured imports from the United States was up 16.1 percent, compared to a jump of 44.1 percent for the European Community and a whopping 66 percent increase for the Asian industrializing countries. The percentage increase for the United States would have been somewhat higher in 1987 without the one-time shipment of gold to Japan in 1986.

Table 5: Japan's Imports of Selected Manufactured Goods, 1985-87

(in millions of dollars)

	1985	1986	1987
Chemicals	$8,073	$9,733	$11,845
Office Machinery	1,545	1,706	2,218
Power Generating Machinery	896	897	1,136
Metalworking Machinery	234	295	277
Textile Machinery	113	134	216
Aircraft	1,484	1,777	1,742
Ships	286	231	269
Precision Instruments	1,265	1,416	1,860
Steel Products	1,480	1,762	2,484
Textiles, Including Clothing	3,886	5,027	7,624
Nonferrous Metals	4,041	3,655	5,644
Toys and Indoor Games	98	176	391

Source: Ministry of Finance

The future growth of manufactured imports in Japan will depend partly on whether the prices of Japanese imports fall in line with currency appreciations. The Bank of Japan's import price indexes have declined significantly as the yen has risen. Chemicals, for example, dropped 27.8 percent in 1986 and another 10.5 percent in 1987. Machinery and transportation equipment fell 21.9 percent in 1986 and 8.5 percent in 1987. While these drops do not match that of the dollar they should not be expected to because they reflect in part the influence of currencies that declined against the yen less than the dollar.

Marketing and Distribution - Imported consumer goods generally pass through the Japanese distribution system which, some importers complain, absorbs the price cuts by increasing its own margins, leaving the retail price unchanged. Even if this is true, import sales could still increase if the higher margins led distributors and retailers to greater promotional efforts.

A Ministry of International Trade and Industry study of retail pricing suggests, however, that at least some of the price cuts are getting through to the consumer, although not necessarily the full reduction. Of 82 imported brandname goods it looked at in January 1988, 35 were priced below their August 1985 levels -- before the dollar started falling; of the 35, 28 were selling at lower retail prices as well. The 47 products whose import prices did not fall were all from Europe, where currencies were more stable against the yen. In short, MITI's report lends credence to the belief that exports from countries with depreciating currencies will end up with lower consumer prices in Japan.

Increasing numbers of retailers and even individuals are attempting to bypass the distribution network by importing directly. Especially prominent are superstore chains, such as Daiei, Inc. and Jusco Co., Ltd., which are even investing in overseas manufacturing facilities. Morgan Stanley and Co. estimates that direct imports accounted for 7.2 percent of total sales at Jusco last year.

This pattern is likely to get another boost as Japanese manufacturing firms increase domestic sales of goods produced by their overseas subsidiaries. They will be following in the well-worn footsteps of U.S. firms. Honda Motor Co., Ltd. is beginning to sell Ohio-made cars in Japan, but Ford Motor Co. has been selling cars made at its plants in Europe in the United States for most of the postwar period. In 1982, 14.6 percent of U.S. imports were from overseas subsidiaries of American firms; the comparable figure in Japan (but for 1983) was only 3.7 percent; the number now is undoubtedly higher but still well below the U.S. level.

Why Japan Imports So Few Manufactured Goods: Some Competing Explanations

Over the years many factors have been cited as contributing to the low share of manufactured goods in Japan's import mix. Some stress cultural influences, others political or economic determinants.

- Compared to countries such as the United States, which have both abundant natural resources, including agricultural land, and the ability to make manufactured goods, Japan has virtually nothing to offer in international commerce except manufactured goods. By necessity a large fraction of its trade will be exports of manufactured products in exchange for imports of industrial and agricultural raw materials. Of course, over time Japan's relative ability to produce manufactured products has changed as, for example, its labor force has become more educated. Those countries with a more complex resource endowment will have more complicated trading patterns.

- Japan continues to maintain barriers against imports, particularly on manufactured goods. Obviously, if the barriers are high, imports are low. Less obviously, so are exports. Consider what happens to the exchange rate when barriers exist. The demand for foreign currency to pay for imports declines, leading to a drop in its value relative to the yen, assuming no offsetting changes such as increased capital flows into the United States. The more expensive yen in turn reduces exports. Even if net exports end up unchanged, with both exports and imports lower, intra-industry trade will probably be less.

Barriers need not be government-imposed. Governments in Japan and elsewhere control the level of tariffs and quotas on manufactured products, but have persuasive power, at best, over business practices such as tight delivery schedules that could be effective in excluding foreign producers. Some barriers such as quotas are absolute, establishing effective ceilings that keep out particular imports regardless of price competitiveness. Others, including tariffs and many business practices, may be price sensitive, and ineffective in the face of a sufficiently large advantage in buying from outside Japan.

- Other countries have barriers against Japanese products. This argument is really the same as the previous one. If Japan is restricted in selling products abroad, its currency will depreciate as the ability of its exporters to earn and then exchange other currencies for yen diminishes. Import prices of goods shipped into Japan will then be higher and imports will decline.

- Macroeconomic policy is out of whack. When the United States has a large budget deficit and Japan a high savings rate, a slight rise in U.S. interest rates will attract Japanese investors, whose money is required to finance the deficit. Japan's demand for dollars increases the dollar's value,

raising the price of exports to Japan. If manufactured goods are more sensitive to price changes than raw materials, their percentage of imports will decline, as will the ratio of Japanese imports to exports.

• Japan has different tastes. Intra-industry trade is more likely if tastes are similar across countries and varied within each country. For example, trade in cars occurs partly because some Swedish drivers have a preference for Peugeots and some French consumers like Volvos. The Japanese have until recently been comparatively united behind one type of car, and domestic makers have produced it efficiently, making imports virtually unnecessary. While affluent Japanese are increasing their purchases of Mercedes and other expensive European imports, significant intra-industry trade in cars is still years away.

• Japan is uniquely geographically isolated among the industrial countries, leading to higher transportation costs and slower deliveries. Exports are more expensive in foreign markets and importers have a harder time selling profitably in Japan, reducing trade in both directions.

Evidence

Policymakers have an obvious interest in knowing which of these arguments is correct. If the Japanese government maintains high import barriers, the excluded American producers obviously lose out and Washington can do U.S. producers and Japanese consumers a big favor by getting Tokyo to reduce or eliminate the barriers. If some Japanese firms refuse to import intermediate goods because they value the long-term relationships with their existing domestic suppliers, Tokyo can try to persuade the firms to change their business practices. If the U.S. budget deficit is to blame, there is little U.S. negotiators can properly ask the Japanese to do, and Washington should redouble its own efforts to reduce the deficit. Most discouragingly, some explanations suggest there is little anyone can do: for example, the Japanese cannot alter geography, being stuck across an ocean or continent from other major industrial countries.

Economists are in the midst of a lively debate as to the relative merits of the different arguments. Japanese barriers of various kinds have received extensive treatment. (See JEI Report No. 28A, July 24, 1987, for a discussion of the Japanese distribution system.)[1] Merely finding a barrier is not the same as assessing its impact. As noted earlier import barriers can work through the exchange rate to reduce exports as well as imports. Moreover, they may or may not be set at levels that carry any impact. The quota on Japanese car exports to the United States may no longer be keeping any cars out of this market, given the recent strength of the yen, which would have reduced imports regardless.

[1] For a list of other references see Robert Z. Lawrence, "Imports in Japan: Closed Markets or Minds?," Brookings Papers on Economic Activity, 1987:2, p. 517-18. For a discussion that emphasizes business practices as barriers to imports, see Daniel I. Okimoto, "Outsider Trading: Coping With Japanese Industrial Organization," in Kenneth P. Pyle, editor, The Trade Crisis: How Will Japan Respond?, Society for Japanese Studies, 1987, pp. 85-116.

To actually assess the impact of one factor or another economists have turned to more sophisticated methods. The general idea is to statistically estimate the factors that influence Japan's trade and then see how much is left to be explained by a "Japan (or other country) policy factor."

Gary R. Saxonhouse of the University of Michigan is a pioneer in this work. He begins by considering the view, almost universally held by the economics profession, that international trade is -- unless policymakers intervene -- a consequence of each country's supply of labor, capital stock, natural resources and intermediate goods. For example, those countries with large populations but little else are expected to produce and export products using their abundant labor. Their imports will be those goods using relatively little labor compared to other inputs. Saxonhouse econometrically asks whether this approach adequately explains Japanese trade or if factors that reflect policy choices are needed.

His answer, according to a paper presented to the American Economics Association in December 1987, is that factor endowments do indeed explain trade patterns and there is no obvious need to include Japanese trade policies as a factor. As Saxonhouse puts it, ". . . this suggests that whatever Japanese (and American) trade policies (and/or informal barriers) may have been, more than likely they have not been a major determinant of trade patterns."[2]

Saxonhouse's conclusions hold even without the inclusion of transportation costs as a factor, the measurement of which has been a contentious issue among those studying the question. Even more importantly, his newest work describes gross imports and exports. In his earlier work, he worked with net exports, which left open the possibility that Japan's barriers had the effect of reducing both exports and imports, leaving net exports little changed but with significant effect on unfortunate American and other would-be exporters to Japan.

Based on Saxonhouse's earlier work, Robert Z. Lawrence of the Brookings Institution argued the need to look at intra-industry trade, which Japan's policies and business practices could be affecting. His econometric work on gross imports appeared to demonstrate that in fact there was a "Japan factor": that Japan's manufactured imports were significantly lower than could be explained by objective factors such as transportation costs, leading him to conclude:

> [I]n 1980, for example, as equations in this study indicate, unusual barriers and preferences reduced Japanese manufactured goods imports about 40 percent. The removal of such barriers would have increased the value of Japanese manufactured imports about $13 billion and lowered Japan's trade surplus in manufactured goods about $16 billion, or some 17 percent. Japan would have considerably more intra-industry trade.[3]

[2]Gary R. Saxonhouse, "Differentiated Products, Economies of Scale and Access to the Japanese Market." (paper presented to the American Economics Association, December 1987), p. 26.

[3]Lawrence, p. 546.

Even Lawrence's conclusion offers less reassurance than it appears to American manufacturing firms hoping that removing Japanese barriers would improve their prospects. His procedure leaves open the possibility that some of the barriers could be American. These, as explained earlier, reduce exports from Japan that in turn affect the exchange rate and end up reducing imports to Japan as well. Lawrence argues, however, that most of the barriers are Japanese. What his data show is that Japan's trade is different. Some of these differences could be deeply rooted in the culture and thus impossible to change. Not necessarily parochial, they could reflect a homogeneity of taste that is the result of narrow social and economic differences in modern Japan. In any event, he concludes that removal of Japan's barriers would increase both Japanese imports and exports, which is not exactly what beleaguered U.S. firms, already fighting what they see as a flood of Japanese imports, want to hear.

At this writing the controversy continues. Lawrence's and Saxonhouse's work will certainly not be the last. Policymakers should stay tuned; the questions go to the heart of the many trade controversies between the United States and Japan.

The Political Dimension

Japan's low level of imports -- especially of manufactured goods -- has become a political issue. The view that the Japanese market is relatively closed may well influence feelings about Japan generally; a sense that the Japanese do not play fairly is of course widespread. Tokyo argues that this is a misperception and would like to see it changed.

Lawrence says that the lack of intra-industry trade between the United States and Japan creates a political problem: relatively few U.S. firms benefit from exports to Japan, so few speak up for Japan politically. Even if reduced Japanese barriers also lead to more exports to the United States, at least the increased U.S. shipments to Japan would create a countervailing political force in the American business community that could ward off some of the more nefarious protectionist political pressures.

The problem for Japan could be that there is considerable truth in both the Saxonhouse and Lawrence arguments -- Saxonhouse in minimizing the economic role of Japanese barriers and Lawrence in seeing the political usefulness of more manufactured goods trade. If so, Tokyo could reduce its remaining governmental barriers and manufactured goods imports would remain about the same: the relative supply of productive inputs would determine trade, meaning American manufacturers would gain little in the Japanese market and Japan would gain nothing in political clout. In this case Japan would be condemned by its natural endowments to continuing political problems in Washington.

Even if Japan does not gain political allies, economists and political scientists generally feel that it would reap political dividends by reducing trade barriers; it would be harder to find evidence that Tokyo is skewing trade to its benefit.

Conclusion

The controversy over manufactured imports is part of a broader disagreement about the role of the Japanese government in the economy. If, as the Japanese argue, the role is relatively minor, there is little that Americans can reasonably ask Tokyo to do to reduce trade tensions. If business practices, for example, are the problem, the government's function is at most to persuade firms through administrative guidance. On the other hand, if there are important barriers that Tokyo could remove on its own, a significantly different pattern of trade between the two countries could emerge from negotiations. For both countries that would mean both new opportunities and new vulnerabilities.

For further information, contact Douglas Ostrom.

* * * * * *

The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.